

24019-L02-SW

Steve Day
C Project
44 Fox Dene
Godalming
Surrey GU7 1YQ

14/11/2024

Dear Steve,

PARK LANE SERVICE STATION –RESPONSE TO EHO

Further to the points raised by Havant Borough Council (HBC) in their email from Tina Pickup dated 1st November 2024, please find our responses below.

Critically, the acoustic model does not appear to model the noise of the water impact from the jet wash on the vehicles themselves or impact with the jet wash enclosure which I assume is of glass construction (please confirm). Noise from this process is likely to be impulsive and as such would be likely to have a detrimental impact on nearby receptors. Only noise from the Istobel 4CA2100 unit appears to have been modelled, the noise level of which is unknown. In these circumstances we would expect measurements to be taken from a unit/set-up which is already in use, which would also confirm whether there is any tonal noise.

To verify the data used, dBx Acoustics has measured noise levels from two 'typical' jet wash machines in the Manchester area. In both cases the models are unknown, one appeared to be a relatively recent model (Tesco filling station, installed in past 2 years) and one is known to have been in use for at least 12 years.

Each machine was measured at 1m from the side of the unit during a "hot shampoo" and "high pressure rinse" cycle, which are the loudest parts of any jet wash operation. The measurements included both motor noise from the machine itself, and water noise.

In both cases, the average sound pressure level over a 4-5 minute wash cycle was 73dB_{LAeq,T}. Motor noise from the machines (lance not in use) was 65-67dB_{LAeq,T}. All jet wash models operate at a similar water pressure and as such significant variations in noise level would not be anticipated between models.

Therefore the assumption made in the assessment of a sound pressure level of 72dB_{LAeq,T} at 1m during a typical 8-minute wash cycle as assumed in the assessment (see 4.4 within the report) is considered appropriate to encompass the overall noise generation of typical jet wash operation, and is likely an over-estimate when taking into account the lower noise activities associated with longer wash cycles, such as foam brushing, and low pressure waxing / shampooing.

As described in section 5.8 of the report, a +3dB penalty has been applied in the assessment for intermittency associated with use of the jet wash. No impulsive acoustic characteristics as defined within ISO1996-1:2016 (brief bursts of sound pressure lasting less than 1 second) occur.

The frequency data from the jet wash measurements indicates no tonal characteristics; this tallies with subjective observations

It should also be borne in mind that the noise climate at the site already includes jet wash and car wash activity; the assessment must be viewed in the context that the proposals do not change the nature of the sound already experienced by residents.

When considering the context of the area the report states that worse affected property at 95 Park Lane is occupied by the site operator, thereby suggesting that there will be more tolerance of the noise by the occupier. However, we note that the property has recently been let through an estate agent which indicates that the property is not occupied by the site operator.

We understand from Ironmoor that the property has been let on a short-term basis (6 months) and longer term plans for the building will be subject to the outcome of this planning application. This does not, however, affect the outcome of the assessment which demonstrates that the requirements of HBC can be met at all times, including at this receptor.

We note that the plans provided with the application show a jet wash which is shielded on three side with no gaps between the sides and rear of the car wash and no gaps under the panes of glass themselves. The applicant should confirm this is the case, as I have only seen arrangements where there are gaps. The presence of gaps will allow noise to escape. The presence of gaps should be taken into account in the noise model. The applicant should advise whether the existing jet wash barrier will be removed, and the acoustic report should confirm whether the noise model includes this barrier.

There will be no gaps between the sides and rear of the car wash. Small gaps (up to 50mm) may be required at the bottom of the screens for the support structure; we confirm that these have been included in the model.

The existing jet wash barrier is not included in the model and is to be removed as part of the development.

In terms of the monitored background sound levels for the area these appear to be higher than we would anticipate. The background levels should have been monitored without the current jet wash in operation and the acoustic report should confirm this. Confirmation should also be provided that no overnight fuel deliveries were made (as prohibited by current planning permission). Any future noise report must include the background noise data set/values including the statistical value, LAeq and LAmax etc. We also require justification of how the "typical" background sound level was derived e.g. was it the modal value etc.

The background sound level was measured during normal operation of the site including the existing jet wash during its permitted hours of operation. This is representative of the existing background sound level at the noise sensitive receptors, as required for assessment in accordance with BS4142. It would not be correct to assess the impact of the proposals against an artificially lowered background sound scenario with the existing jet wash inoperable.

No overnight fuel deliveries were made during the noise survey. Staff are aware of the current planning conditions imposed on the site.

We confirm that background noise levels presented are the modal value of the 15-minute dB_{LA90} values measured during the daytime (07:00h-23:00h) and night time (23:00h-07:00h) period, while a logarithmic average has been used to establish the day and night time $dB_{LAeq,T}$ value. Full measurement data are presented in the spreadsheet accompanying this letter.

Maximum noise levels are not used in the assessment and do not form part of the BS4142:2014 assessment methodology.

Any future report provided by dBx Acoustics should be provided with the noise data and calculations used in the acoustic model, including any assumptions used in the model.

Assumptions are detailed in paragraphs 5.4-5.8 of the report.

Other than the noise model itself, our calculations are also presented in full within the report.

We trust that this response covers the concerns raised by the Local Planning Authority. We confirm that the outcome of the noise impact assessment remains valid, and that the proposed development can comply with the requirements of Havant Borough Council for operation during the daytime hours 07:00h-23:00h as well as overnight.

It is noted that the current jet wash is only permitted to operate during the hours of 07:00h-19:00h. The Applicant would be willing to accept a restriction of e.g. 07:00h-22:00h (21:00h on Sunday / Bank Holidays) if this would help to assuage the LPA's concerns relating to noise impact.

Yours Sincerely,



Susan Witterick

Director, dBx Acoustics Ltd